vexo-depressâ, lævi, olivaceâ, apud dorsum gibbâ; spirâ brevi, labio cum callo expanso crasso tecto, marginibus usque ad spiram decurrentibus, columellâ lævi, labro extus calloso incrassato.

Hab. ——? Mus. Cuming.

4. Nassa callospira, A. Adams. *N. testâ ovatâ, pallidâ, fasciâ transversâ cinereâ ornatâ; spirâ acutâ, transversim liratâ, plicis nodosis longitudinalibus instructâ; labio cum callo magno albo extenso tecto, marginibus usque ad spiram decurrentibus; columellâ anticè biplicatâ; labro crasso calloso, marginato, intus valde lirato.*

Hab. Island of Burias, 6 fathoms, coral sand (*H. C.*). Mus. Cuming.

5. Nassa nana, A. Adams. *N. testâ ovatâ, spirâ acutâ; anfractibus rotundatis, rufescente, fasciâ pallidâ luteâ ornatâ, longitudinaliter plicatâ, transversim semistriatâ; labio cum callo expanso tenui tecto; columellâ rugosulâ; labro marginato, intus sulcato.*

Hab. Dumaguete, island of Negros, coarse black sand, 11 fathoms (*H. C.*). Mus. Cuming.

6. Nassa bellula, A. Adams. *N. testâ ovatâ, spirâ acuminatâ, acutâ; anfractibus angulatis, pallidulâ, fasciâ luteolâ ornatâ, longitudinaliter plicatâ, transversim liratâ; interstitiis concinnè longitudinaliter striatis, labio callo magno tecto; columellâ rugosâ; labri margine rugoso calloso, intus crenulato.*

Hab. Catbalonga, island of Samaar, under stones, low water. Mus. Cuming.

7. Nassa bimaculosa, A. Adams. *N. testâ suborbiculari, apud dorsum valde convexâ, nodosâ; spirâ acutâ, longitudinaliter subplicatâ, anticè transversim sulcatâ, olivaceâ, fasciâ pallidâ transversâ cinctâ, labio cum callo crasso albo magno suborbiculari cincto; columellâ lævi, anticè uniplicatâ; labro valde incrassato marginato, anticè sinuato, intus lirato, extus maculis duabus rufofuscis ornato.*

Hab. Island of Siquijor, on mud-banks (*H. C.*). Mus. Cuming.

8. Nassa leptospira, A. Adams. *N. testâ ovatâ, apud dorsum convexâ, nodosâ; spirâ productâ, acutâ, lutescente longitudinaliter plicatâ, anticè transversim striatâ, labio cum callo luteo crasso tecto; columellâ corrugatâ, labro intus lirato.*

Hab. Ilo Ilo, island of Panay, on mud-banks, low water (*H. C.*). Mus. Cuming.

[To be continued.]

BOTANICAL SOCIETY OF EDINBURGH.

January 13, 1853.—Professor Balfour, President, in the Chair.

The following papers were read :—

1. "On the Lichens used in Dyeing," by W. Lauder Lindsay, M.D.

2. "Remarks on the Flora of the District in the neighbourhood of Peebles," by James Young, Esq. The author gave a brief account of some botanical walks made in the autumn of 1851.

3. "On the Cultivation of *Victoria regia* in Jamaica," by Dr. G.

M'Nab. Seeds sent from the Botanic Gardin, Edinburgh, in September 1851, had been planted by the Hon. Edward Chitty, at Kingston, in a tank prepared for the purpose, and the plant had grown vigorously and had flowered well.

February 10.—Professor Balfour, President, in the Chair.

The following papers were read:—

1. "Remarks on British Plants," by Charles C. Babington, M.A., F.R.S., F.L.S. &c. This paper will be found in the present Number of the 'Annals,' and in the Society's Transactions.

2. "On the Dyeing Properties of the Lichens—Part 2," by W. L. Lindsay, M.D. In this paper and that read at the preceding meeting, the author gave a short but comprehensive view of the present state of the different branches of Lichenology in this country and on the continent, and showed, from the aggregate amount of information which is at present possessed thereupon, the great necessity there still exists for renewed and extended experimental investigation. He then considered—1. The vast importance of this humble tribe of plants in the grand œconomy of nature, as the pioneers and founders of *all* vegetation. 2. Their importance to man and the lower animals, as furnishing various articles of food. 3. Their importance in medicine, and especially in its past history, at home and abroad. 4. Their importance in the useful and fine arts, and especially in the art of dyeing. 5. Their affinities and analogies to other cryptogamic families, and to the Phanerogamia. 6. Their value as an element of the picturesque in nature; and, 7. Their typical significance.

He then adverted more specially to the subject of his communication, under the ten following heads:—

I. The colours of the thallus and apothecia of Lichens—their causes, and the circumstances which modify and alter them.
II. History of the application of their colouring matters to the art of dyeing.
III. Chemical nature and general properties of these colouring matters.
IV. Tests and processes for estimating qualitatively and quantitatively the colorific powers of individual species—with their practical applications.
V. Processes of manufacture of the Lichen-dyes, on the large and small scale, in different countries—with the principles on which they are founded.
VI. Nomenclature of the dye-Lichens, and of the Lichen-dyes.
VII. Botanical and commercial sources of the same.
VIII. Special applications of the Lichen-dyes in the arts.
IX. Commercial value of the dye-Lichens, and their products.
X. Geographical distribution of the dye-Lichens—with the effect of climate, situation, &c., on their colorific materials.

Four of these sections were elaborately treated at these two Meetings, and the others left for notice at a future opportunity.

3. "On the occurrence of *Asplenium germanicum, Convallaria Polygonatum*, and other rare plants, at Kyloe, Northumberland," by George R. Tate, Esq. "Kyloe Crags are chiefly composed of rudely columnar basalt. Sandstone comes out from beneath this, and at the western end forms a steep cliff. I had the good fortune to find *Asplenium germanicum* growing sparingly upon the basalt; its pale green fronds at once attracted my attention. The few specimens I observed were remarkably luxuriant; I counted upwards of thirty fronds growing on a single root. *Asplenium septentrionale* still exists in considerable abundance, on the high and exposed portions of the crag, as well as among the debris. I obtained *Convallaria Polygonatum*, which was recorded by Wallis in his History of Northumberland."

4. "List of Plants in Flower in the open air, in the Royal Botanic Garden, on the 1st of February 1853," by Mr. M'Nab.

Eranthis hyemalis.
Galanthus nivalis.
Potentilla Fragariastrum.
Sisyrinchium grandiflorum.
Helleborus odorus.
—— orientalis.
—— niger.
—— viridis.
—— atrorubens.
—— olympicus.
—— —— rubra.
Rhododendron atrovirens.
Hepatica triloba, numerous varieties.
Aubretia grandiflora.
Primula vulgaris.
Lamium album.
Tussilago fragrans.
Daphne Mezerium.
—— Laureola.
Erica herbacea.
Cornus mascula.
Knappia agrostidea.
Tritonia media.
Viola odorata.

5. "On the Effects of the Mildness of the month of January 1853, in the Isle of Wight," by T. Bell Salter, M.D. "On the evening of the 3rd of January I was struck by seeing two or three of the small bat (*Vespertilio Pipistrellus*) flying about just as on a summer's evening. Whenever we are favoured with a little sunshine, the little *Tipulidæ* may be seen enjoying their peculiar up-and-down flights, and the earthworms may be seen every day, lying or crawling on the ground, as in the spring and autumn. Scarcely any wild-fowl have yet resorted to our coasts, as is usual at this season. Our native birds have quite their spring song, and the nest of a song-thrush, with four eggs, was found at Comley. One effect of mildness of season, which I observed a few (three or four) years since, I do not perceive, although on that occasion the mildness was not so great. On that occasion few of the large geometric spiders (*Epëira Diadema*) perished as usual in the autumn or early winter, but very generally remained till spring. When, however, I looked for their increased activity, and their attaining an unusual size as the warmth of their second year increased, they soon disappeared.

"At the present time, the effects of the mildness of the temperature on the vegetable kingdom are yet more remarkable than on the animal. For nearly a month past, Primroses have been blossoming

on the banks, and the green swards have been bespangled with Daisies, while the gorse bushes (*Ulex europæus*) are getting quite yellow with the abundance of bloom. I would enumerate the following, which within the last few days I have observed in flower in the fields, woods and hedges, viz.:—

Ranunculus Ficaria, and several other species.
Sinapis arvensis.
Cardamine hirsuta.
Viola sylvatica.
Lychnis diurna.
Stellaria Holostea.
—— media.
Mœhringia trinervis.
Cerastium triviale.
—— glomeratum.
Geranium Robertianum.
Linum angustifolium, nearly in flower.
Fragaria vesca.
Potentilla Fragariastrum.
Alchemilla arvensis.
Æthusa Cynapium.
Heracleum sphondylium.
Torilis Anthriscus.
Anthriscus sylvestris.
Sonchus arvensis.
Lapsana communis.
Senecio—several species.
Pyrethrum inodorum.
Erythræa Centaurium.
Veronica serpyllifolia.
Lamium purpureum.
Anagallis arvensis.
Daphne Laureola.
Mercurialis perennis.

"The Honeysuckle and Elder are in leaf. I saw a few Hawthorn leaves, and there was one bush which had sprouted to the length of 3 inches. The Oaks, Elms and Hazels have already an altered tint, from the swelling of their buds. On the banks the leaves of the wild Arum are fully developed; and in the hedges the *Rubia peregrina* is grown to several inches.

"In the gardens there are in blossom, of Roses several varieties; Arbutus, Laurustinus, Coronilla, an Acacia, Violets, Daffodils, Periwinkles, Anemones, Hepatica, Snowdrop, Stock, Scarlet Pelargonium, *Omphalodes verna*, Mignonette, *Petasites fragrans*, *Sphenogyne speciosa*, Scabious, and others.

"The Virginian-Stock is becoming quite abundant. I have observed in bloom the common Wallflower, the *Cheiranthus mutabilis*, and the *C. scoparius*; and it is a curious instance of the wonderful adaptability to climate in some plants, that the two latter, though natives of warmer regions—Madeira and Teneriffe—are yet more forward in flowering than the British species. To continue:—there are in flower Candytuft, garden Cress, Picotee, Almond, *Cydonia japonica*, *Œnothera rosea*, *Ageratum conyzoides*, *V. teucroides*, Polyanthuses and Primroses, several species of *Daphne*, the *Iris germanica*, and I have no doubt many more might be added.

"The Clematis, in many instances, has grown more than a foot in length. Potatoes are in many places a foot in height. Near Ryde, *Aponogeton distachyon* is blooming to perfection."

March 10.—Professor Balfour, President, in the Chair.

The following papers were read:—

1. "On the occurrence of Palms and Bamboos, with Pines and

other northern forms, at considerable elevations on the Himalaya," by Major Madden, H.E.I.C.S., F.R.S.E. This paper will appear in the 'Annals of Natural History' and the Society's Transactions.

2. "Remarks on British Plants, Part II.," by Charles C. Babington, M.A., F.R.S., F.L.S. This paper will appear in the 'Annals of Natural History' and the Society's Transactions.

Dr. Balfour stated that the *Hypericum* called *H. anglicum* had been observed by him, in large quantity, apparently wild, on the banks of the Glanmire river, near Cork. The plant had also been seen by Mr. Sibbald, at Aghada, and Dr. Balfour exhibited a specimen picked by him, near Culross, in July 1833, which seemed to be the same plant. Another specimen gathered near Galway, in August 1838, resembled the *H. anglicum* in the size of its petals, length of styles, and form of capsule.

Dr. Balfour exhibited a specimen of *Matricaria maritima* from Marseilles, which seemed to differ in its remarkably pale phyllaries, as well as in its leaves, capitulum, and habit, from any British form he had seen.

3. "On a remarkable Formation of a Stem-root in the decayed trunk of a Willow," by John Lowe, Esq. Communicated by Dr. Balfour. A sketch was exhibited of a large willow in which a root had been developed in a peculiar manner so as to form a main stem. Mr. Lowe observed—"The tree (*Salix viminalis*) having become decayed in the centre, a root had evidently been sent down by a portion of the upper extremity of the tree, through the rotten sponge-like substance which filled up the interior. Feeding upon this and the moisture absorbed by it, the root at length reached the ground, where it established a firm hold; the circumference then died away, until the root, now taking on the functions of the stem and becoming entirely denuded, at length became the only support of the living top. The remaining part of the periphery only acts as a mechanical support. The circumference of the root-stem is 18 inches at top and 13 at the bifurcation, about 3 feet above the ground; it has latterly taken on more stem-functions by putting forth several branches. The tree is growing near Sleaford, where I have observed its progress for some years."

PROGRESS OF ZOOLOGY IN IRELAND.

An Association for the promotion of Practical Zoology has been formed amongst the Under Graduates of Trinity College, Dublin, with the approval of the Provost and board of senior Fellows: this Association has for its special object the cultivation of Irish zoology, and presents in its constitution some striking peculiarities. The number of ordinary members, all Under Graduates, is limited to thirty-two, being as it were one for each county; the limit being designed to make the body more suited for working well together than a larger corps would probably be. The desire to draw the members from the different counties is with the view that when they quit college, still remaining as corresponding members, they should